The Higgs Boson is On!

by Charlie, Joseph, & Frank

The Higgs is awesome, the Higgs is cool

Now science has a very good tool

The Higgs field gives a chance for mass

To stay together and not just pass

Thanks to that we can all just dance

I’m rocking in all sorts of articles

not like any other particles

I’m what Einstein wanted to define

He looked for a unified theory

And thanks to me, we see it more clearly

**CHORUS**

**The Higgs decayed with utmost certainty**

**2 months after May,**

**they declared they found it**

**Certainly more than a very good chance**

**1 in 3.5 mill-i-on**

**That it wasn’t what they found**

**That’s pretty good all around.**

**Go tell yer ma – that’s 5 sigma!**

**Fivesig wha?**

**5 sigma!**

**Fivesig huh?**

**I said 5 sigma!**

**The Higgs Boson is on!**

**Oh, Higgs Boson is on**

**I said the Higgs Boson is on**

**Oh, the Higgs Boson is on**

**Let me hear ya say**

**The Higgs Boson is on!**

This god particle is such a miracle

It was created in a receptacle

On the border of Switzerland

And it boosts the use of the thinking gland

I decayed so fast, with no delay

The photons I became zoomed away

How were they measured? By calorimeters

These swift photons can be found

But its hard in the mess of a battleground

Another path I take is into 2 Z bosons

They decay into

2 muons, an electron & finally electron’s evil twin, the anitelectron

Another way I decay is into 2 W’s

Muon, neutrino, antineutrino, antielectron

All these particles spinning around

Here we have a

Bottom quark and

bottom quark’s dark side

That decays to hadron jets.

CHORUS

At the LHC they collide protons

To create Higgs Bosons

The particles accelerate at nearly the speed of light

The explosion is quite a fright

The CMS and Atlas detect the particles

that are blasted out

And are on the lookout for two photons at 125 gEV and leptons numbered 1+3

4 by 4, not anymore

The standard model is not like before

4 rows of 3 and a column of 5.

That’s what happened when the Higgs arrived.

All those particles lounging around,

but I have work to do.

I can’t stop or their mass would be gone.

I hold up a field that makes the galaxy strong.

CHORUS

Now we’d like to give a big thank you.

Let’s give a big whoo - hoo

For a special prof from the UW

Who’s been searching for the Higgs so long

She’s the reason that we wrote this song

Professor Who at the UW?

Professor Wu, that is who.

Wu who? Sau Lan Wu, that’ who.

Whoo – hoo for Professor WU at the UW!